Engineering Interpretations

Building Site Development

Soil properties influence development of building sites, including the selection of the site, the design of the structure, construction, post construction performance, and maintenance. Soil limitation ratings of slight, moderate, and severe are given for shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns, landscaping, and golf fairways.

Shallow Excavations

Shallow excavations are trenches or holes dug in the soil to a maximum depth of 5 or 6 feet. They are used for pipelines, sewer lines, telephone and power transmission lines, basements, open ditches, and cemeteries. The ratings are based on the soil properties that influence ease of digging and resistance to sloughing.

Dwellings With or Without Basements

These are single-family houses of three stories or less. The foundation is assumed to be spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or the depth of maximum frost penetration, whichever is deeper, for houses without basements, or at a depth of 7 feet if a basement is constructed. The ratings are based on properties affecting soil strength and settlement under a load, and those that affect excavation and construction costs.

Small Commercial Buildings

Limitation ratings are given for the undisturbed soil on which small commercial buildings of less than three stories without basements are built. The foundation is assumed to be placed on spread footings of reinforced concrete at a depth of 2 feet or the depth of maximum frost penetration, whichever is deeper.

Local Roads and Streets

Limitation ratings are given for the use of soils for construction of improved local roads and streets that have all-weather surfacing, commonly of asphalt, gravel with binder in it, or concrete, and that are expected to carry automobile traffic all year. These roads and streets are graded to shed water, and conventional drainage measures are provided. With the probable exception of the hard surface, roads and streets are built mainly from the soil at hand.

Lawns, Landscaping, and Golf Fairways

The soils are rated for their use in establishing and maintaining turf for lawns and golf fairways and ornamental trees and shrubs for residential type landscaping. The ratings are based on the use of soil material at the location with some land smoothing. Irrigation may or may not be needed and is not a criterion in rating. Traps, trees, roughs, and greens are not considered as part of the golf fairway. The properties considered are those listed that affect plant growth and trafficability after vegetation is established.

This subsection includes:

• (a) Building Site Development

Building Site Development

Map symbol and soil name	Dwellings without bas	ements	Dwellings with basem	ents	Small commercial build	dings	Local roads and stro	eets	Lawns and landscap	ing
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AmB: Armster	 Moderately limited ~shrink-swell (moderately limited) ~wetness (slightly limited)	 0.45 0.01	Limited ~wetness (limited) ~shrink-swell (moderately limited)		 Moderately limited ~shrink-swell (moderately limited) ~slope (slightly limited)	 0.45 0.15	 Very limited ~low strength (very limited) ~shrink-swell (moderately limited)	 1.00 0.45	 Moderately limited ~too acid (moderately limited) 	0.42
AmC: Armster	Moderately limited ~shrink-swell (moderately limited) ~slope (slightly limited) ~wetness (slightly limited)	0.45	Limited -wetness (limited) -shrink-swell (moderately limited) -slope (slightly limited)	0.61	Limited ~slope (limited) ~shrink-swell (moderately limited)	0.45	 Very limited ~low strength (very limited) ~shrink-swell (moderately limited)	 1.00 0.45	 Moderately limited ~too acid (moderately limited) 	0.42
AmC2: Armster	Moderately limited ~shrink-swell (moderately limited) ~slope (slightly limited) ~wetness (slightly limited)	0.45	 Limited ~wetness (limited) ~shrink-swell (moderately limited) ~slope (slightly limited)	 0.61 0.45 0.15	 Limited ~slope (limited) ~shrink-swell (moderately limited)	 0.83 0.45	 Very limited ~low strength (very limited) ~shrink-swell (moderately limited)	 1.00 0.45	 Moderately limited ~too acid (moderately limited) 	0.42
AmD: Armster	Limited -slope (limited) -shrink-swell (moderately limited) -wetness (slightly limited)	İ	Limited -slope (limited) -wetness (limited) -shrink-swell (moderately limited)	 0.76 0.61 0.45	 Very limited ~slope (very limited) ~shrink-swell (moderately limited)	 1.00 0.45 	 Very limited ~low strength (very limited) ~slope (limited) ~shrink-swell (moderately limited)	 1.00 0.63 0.45	 Limited ~slope (limited) ~too acid (moderately limited)	0.63

Building Site Development

Map symbol and soil name	Dwellings without base	ements	Dwellings with basem	ents	Small commercial buil	dings	Local roads and str	eets	Lawns and landscap	ing
	Rating class and limiting features	Value 	Rating class and limiting features	Value	Rating class and limiting features	Value 	Rating class and limiting features	Value 	Rating class and limiting features	Value
AmD2:				—— 						
Armster	Limited ~slope (limited) ~shrink-swell (moderately limited) ~wetness (slightly limited)	 0.76 0.45 0.01	Limited ~slope (limited) ~wetness (limited) ~shrink-swell (moderately limited)	 0.61 0.45	Very limited ~slope (very limited) ~shrink-swell (moderately limited)	 1.00 0.45 	Very limited -low strength (very limited) -slope (limited) -shrink-swell (moderately limited)	İ	Limited ~slope (limited) ~too acid (moderately limited)	0.63
AmE2: Armster	- Very limited - slope (very limited) - shrink-swell (moderately limited) - wetness (slightly limited)	 1.00 0.45 0.01	 Very limited ~slope (very limited) ~wetness (limited) ~shrink-swell (moderately limited)	 1.00 0.61 0.45	 Very limited ~slope (very limited) ~shrink-swell (moderately limited)	0.45	 Very limited ~low strength (very limited) ~slope (very limited) ~shrink-swell (moderately limited)	 1.00 1.00 1.00 0.45	 Very limited ~slope (very limited) ~too acid (moderately limited)	1.00
ArC3: Armster	Moderately limited ~shrink-swell (moderately limited) ~slope (slightly limited) ~wetness (slightly limited)	0.45	 Limited ~wetness (limited) ~shrink-swell (moderately limited) ~slope (slightly limited)	 0.61 0.45 0.15	 Limited ~slope (limited) ~shrink-swell (moderately limited)	0.83	 Very limited ~low strength (very limited) ~shrink-swell (moderately limited)	 1.00 0.45	 Moderately limited ~too clayey (moderately limited) ~too acid (moderately limited)	0.42
ArD3: Armster	Limited -slope (limited) -shrink-swell (moderately limited) -wetness (slightly limited)	 0.76 0.45 0.01	Limited -slope (limited) -wetness (limited) -shrink-swell (moderately limited)	 0.76 0.61 0.45	 Very limited ~slope (very limited) ~shrink-swell (moderately limited)	 1.00 0.45 	 Very limited ~low strength (very limited) ~slope (limited) ~shrink-swell (moderately limited)	 1.00 0.63 0.45	Limited -slope (limited) -too clayey (moderately limited) -too acid (moderately limited)	0.42

Building Site Development

Map symbol and soil name	 Dwellings without base 	ements	 Dwellings with basem 	ents	 Small commercial build 	dings	 Local roads and str	eets	 Lawns and landscap 	ing
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Bk: Blackoar	 Very limited ~wetness (very limited) 	1.00	 Very limited ~wetness (very limited) 	1.00	 Very limited ~wetness (very limited) 	1.00	 Very limited ~wetness (very limited) ~low strength (very limited)	 1.00 1.00	Very limited ~wetness (very limited)	1.00
Co: Colo	 Very limited ~wetness (very limited) ~flooding (very limited) ~shrink-swell (moderately limited)	 1.00 0.45	 Very limited ~flooding (very limited) ~wetness (very limited) ~shrink-swell (limited)	 1.00 1.00 0.75	 Very limited ~flooding (very limited) ~wetness (very limited) ~shrink-swell (moderately limited)	 1.00 1.00 0.45	 Very limited ~low strength (very limited) ~wetness (very limited) ~flooding (very limited)	 1.00 1.00 1.00	Very limited ~wetness (very limited) ~flooding (moderately limited)	 1.00 0.60
GnB: Greenton	 Very limited ~shrink-swell (very limited) ~wetness (limited)	 1.00 0.79 	 Very limited ~wetness (very limited) ~shrink-swell (very limited)	1.00	 Very limited ~shrink-swell (very limited) ~wetness (moderately limited) ~slope (slightly limited)	 1.00 0.45 0.15	(very limited) ~shrink-swell (very limited)	 1.00 1.00 1.00 0.45	Moderately limited ~wetness (moderately limited)	 0.45
GrC2: Greenton	 Very limited ~shrink-swell (very limited) ~wetness (limited) ~slope (slightly limited)	 1.00 0.79 0.15	 Very limited ~wetness (very limited) ~shrink-swell (very limited) ~slope (slightly limited)	 1.00 1.00 0.15	 very limited ~shrink-swell (very limited) ~slope (limited) ~wetness (moderately limited)	 1.00 0.83 0.45	(very limited) ~shrink-swell (very limited)	 1.00 1.00 0.45	Moderately limited -too clayey (moderately limited) -wetness (moderately limited)	0.45

Building Site Development

Map symbol and soil name	Dwellings without bas	sements	Dwellings with baser	ments	Small commercial buil	dings	Local roads and str	eets	Lawns and landscap	oing
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
GrD2:										
Greenton	- Very limited ~shrink-swell (very limited) ~wetness (limited) ~slope (limited)	1.00	Very limited	1.00	Very limited ~slope (very limited) ~shrink-swell (very limited) ~wetness (moderately limited)	 1.00 1.00 0.45	Very limited ~low strength (very limited) ~shrink-swell (very limited) ~slope (limited)	İ	Limited ~slope (limited) ~too clayey (moderately limited) ~wetness (moderately limited)	0.45
GrD3:						 				
Greenton	- Very limited ~shrink-swell (very limited) ~wetness (limited) ~slope (limited)	1.00	Very limited -wetness (very limited) -shrink-swell (very limited) -slope (limited)	1.00	Very limited ~slope (very limited) ~shrink-swell (very limited) ~wetness (moderately limited)	1.00	Very limited -low strength (very limited) -shrink-swell (very limited) -slope (limited)	1.00	Limited ~slope (limited) ~too clayey (moderately limited) ~wetness (moderately limited)	0.45
GsA: Grundy	- Very limited - where well (very limited) - wetness (limited)	1.00	 Very limited ~wetness (very limited) ~shrink-swell (very limited)	1.00	 Very limited ~shrink-swell (very limited) ~wetness (moderately limited)	 1.00 0.45	 Very limited ~low strength (very limited) ~shrink-swell (very limited) ~wetness (moderately limited)	 1.00 1.00 0.45	 Moderately limited ~wetness (moderately limited) 	0.45
GsB: Grundy	- Very limited ~shrink-swell (very limited) ~wetness (limited)	1.00	 Very limited ~wetness (very limited) ~shrink-swell (very limited)	1.00	 Very limited ~shrink-swell (very limited) ~wetness (moderately limited) ~slope (slightly limited)	 1.00 0.45 0.15	 Very limited ~low strength (very limited) ~shrink-swell (very limited) ~wetness (moderately limited)	1.00	 Moderately limited ~wetness (moderately limited) 	0.45

Building Site Development

Map symbol and soil name	Dwellings without base	ements	Dwellings with basem	nents	Small commercial build	dings	Local roads and str	eets	Lawns and landscap	oing
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value 	Rating class and limiting features	Value 	Rating class and limiting features	Value
GuB2: Grundy	- Very limited ~shrink-swell (very limited) ~wetness (limited)	 1.00 0.79	 Very limited ~wetness (very limited) ~shrink-swell (very limited)	1.00	 Very limited ~shrink-swell (very limited) ~wetness (moderately limited) ~slope (slightly limited)	 1.00 0.45 0.15	(very limited)	 1.00 1.00 0.45	 Moderately limited ~too clayey (moderately limited) ~wetness (moderately limited)	0.45
GuC2: Grundy	- Very limited - shrink-swell (very limited) - wetness (limited) - slope (slightly limited)	 1.00 0.79 0.15	Very limited -wetness (very limited) -shrink-swell (very limited) -slope (slightly limited)	1.00	 Very limited ~shrink-swell (very limited) ~slope (limited) ~wetness (moderately limited)	 1.00 0.83 0.45	(very limited)	 1.00 1.00 1.00 0.45	 Moderately limited ~too clayey (moderately limited) ~wetness (moderately limited)	0.45
Ke: Kennebec	- Very limited ~flooding (very limited)	 1.00 	Very limited ~flooding (very limited) ~wetness (slightly limited)	1.00	 Very limited ~flooding (very limited)	 1.00 	 Very limited ~low strength (very limited) ~flooding (rare) (limited)	 1.00 0.90	 Not limited 	
LaB: Ladoga	- Moderately limited ~shrink-swell (moderately limited)	 0.45 	 Slightly limited ~shrink-swell (slightly limited) ~wetness (slightly limited)	0.20	 Moderately limited ~shrink-swell (moderately limited) ~slope (slightly limited)	 0.45 0.15	 Very limited ~low strength (very limited) ~shrink-swell (moderately limited)	 1.00 0.45	 Not limited 	

Building Site Development

Map symbol and soil name	Dwellings without base	ements	Dwellings with basen	ments	Small commercial build	dings	Local roads and str	eets	Lawns and landscap	ping
	Rating class and limiting features	Value	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LaC2: Ladoga	 - Moderately limited ~shrink-swell (moderately limited) ~slope (slightly limited)		Slightly limited ~shrink-swell (slightly limited) ~slope (slightly limited) ~wetness (slightly limited)	İ	 Limited ~slope (limited) ~shrink-swell (moderately limited)	0.83	(very limited)	 1.00 0.45	 Not limited 	
LaD2: Ladoga	 - Limited ~slope (limited) ~shrink-swell (moderately limited)	 0.76 0.45 	Limited ~slope (limited) ~shrink-swell (slightly limited) ~wetness (slightly limited)	0.76	 Very limited ~slope (very limited) ~shrink-swell (moderately limited)	 1.00 0.45	 Very limited ~low strength (very limited) ~slope (limited) ~shrink-swell (moderately limited)	 1.00 0.63 0.45	 Limited ~slope (limited) 	0.63
LaE: Ladoga	 - Very limited ~slope (very limited) ~shrink-swell (moderately limited)	 1.00 0.45 	 Very limited ~slope (very limited) ~shrink-swell (slightly limited) ~wetness (slightly limited)	1.00	 Very limited ~slope (very limited) ~shrink-swell (moderately limited)	 1.00 0.45 	(very limited)	 1.00 1.00 0.45	 Very limited ~slope (very limited)	1.00
LdB: Lagonda	 - Very limited ~shrink-swell (very limited) ~wetness (moderately limited)	 1.00 0.51 	 Very limited ~wetness (very limited) ~shrink-swell (very limited)	1.00	Very limited ~shrink-swell (very limited) ~slope (slightly limited) ~wetness (slightly limited)	 1.00 0.15 0.13	(very limited) ~shrink-swell (very limited)	 1.00 1.00 0.13	 Slightly limited ~wetness (slightly limited) 	0.13

Building Site Development

Map symbol and soil name	Dwellings without base	ements	Dwellings with basen	nents	Small commercial buil	dings	Local roads and str	eets	Lawns and landscap	oing
	Rating class and limiting features	Value 	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LdB2: Lagonda	Moderately limited ~wetness (moderately limited) ~shrink-swell (moderately limited)	0.45	 Very limited ~wetness (very limited) ~shrink-swell (limited)	1.00	Moderately limited ~shrink-swell (moderately limited) ~slope (slightly limited) ~wetness	0.45	(moderately limited)	0.45	 Slightly limited ~wetness (slightly limited)	0.13
LdC: Lagonda	Very limited	 1.00 0.51 0.15	 Very limited ~wetness (very limited) ~shrink-swell (very limited) ~slope (slightly limited)	1.00	<pre>(slightly limited) Very limited ~shrink-swell (very limited) ~slope (limited) ~wetness (slightly limited)</pre>	1.00	<pre>(slightly limited) Very limited ~low strength (very limited) ~shrink-swell (very limited) ~wetness (slightly limited)</pre>	1.00	 Slightly limited ~wetness (slightly limited)	0.13
LgC2: Lagonda	 - Moderately limited ~wetness (moderately limited) ~shrink-swell (moderately limited) ~slope (slightly limited)	0.45	 Very limited ~wetness (very limited) ~shrink-swell (limited) ~slope (slightly limited)	1.00	Limited -slope (limited) -shrink-swell (moderately limited) -wetness (slightly limited)	0.83	 Very limited ~low strength (very limited) ~shrink-swell (moderately limited) ~wetness (slightly limited)	 1.00 0.45 0.13	 Moderately limited ~too clayey (moderately limited) ~wetness (slightly limited)	0.30
LgC3: Lagonda	 - Moderately limited ~wetness (moderately limited) ~shrink-swell (moderately limited) ~slope (slightly limited)	0.45	 Very limited ~wetness (very limited) ~shrink-swell (limited) ~slope (slightly limited)	1.00	 Limited ~slope (limited) ~shrink-swell (moderately limited) ~wetness (slightly limited)	0.83	(moderately limited)	 1.00 0.45 0.13	 Moderately limited ~too clayey (moderately limited) ~wetness (slightly limited)	0.30

Building Site Development

Map symbol and soil name	Dwellings without base	ements	Dwellings with basem	ents	 Small commercial build 	dings	Local roads and str	eets	Lawns and landscap	ing
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LmB: Adair	 Moderately limited ~wetness (moderately limited) ~shrink-swell (moderately limited)	0.45	 Very limited ~wetness (very limited) ~shrink-swell (moderately limited)	0.36	 Moderately limited ~shrink-swell (moderately limited) ~wetness (slightly limited) ~slope (slightly limited)	0.45	(moderately limited)	 1.00 0.45 0.28	 Moderately limited ~too acid (moderately limited) ~wetness (slightly limited)	0.42
Lamoni	 Very limited ~shrink-swell (very limited) ~wetness (moderately limited)	 1.00 0.59	 Very limited ~wetness (very limited) ~shrink-swell (very limited)	 1.00 1.00	Very limited	 1.00 0.28 0.15	 Very limited ~low strength (very limited) ~shrink-swell (very limited) ~wetness (slightly limited)	 1.00 1.00 0.28	 Moderately limited ~too clayey (moderately limited) ~wetness (slightly limited)	0.60
LmB2: Adair	 Moderately limited ~wetness (moderately limited) ~shrink-swell (moderately limited)	0.45	 Very limited ~wetness (very limited) ~shrink-swell (moderately limited)	 1.00 0.45	 Moderately limited ~shrink-swell (moderately limited) ~wetness (slightly limited) ~slope (slightly limited)	0.45	 Very limited ~low strength (very limited) ~shrink-swell (moderately limited) ~wetness (slightly limited)	 1.00 0.45 0.28	 Moderately limited ~too acid (moderately limited) ~wetness (slightly limited)	0.42
Lamoni	 Very limited ~shrink-swell (very limited) ~wetness (moderately limited)	 1.00 0.59 	 very limited very limited) shrink-swell (very limited)	 1.00 1.00 	 very limited ~shrink-swell (very limited) ~wetness (slightly limited) ~slope (slightly limited)	 1.00 0.28 0.15	 Very limited ~low strength (very limited) ~shrink-swell (very limited) ~wetness (slightly limited)	 1.00 1.00 0.28	 Moderately limited ~too clayey (moderately limited) ~wetness (slightly limited)	0.60

Building Site Development

Map symbol and soil name	Dwellings without base	ements	Dwellings with basem	ents	Small commercial build	dings	Local roads and str	eets	Lawns and landscap	ing
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LmC:		j I		j I	 	j I		j 		į į
Adair	Moderately limited	İ	Very limited	j	Limited	j	Very limited	j	Moderately limited	j
	~wetness	0.59	~wetness	1.00	~slope	0.83		1.00	~too acid	0.42
	(moderately limited)		(very limited)		(limited)		(very limited)		(moderately limited)	1
	~shrink-swell	0.45	~shrink-swell	1	~shrink-swell	0.45	~shrink-swell	0.45	~wetness	0.28
	(moderately limited) ~slope	 0.15	(moderately limited) ~slope	 0.15	(moderately limited) ~wetness	 0.28	(moderately limited) ~wetness	0.28	(slightly limited)	
	(slightly limited)		(slightly limited)		(slightly limited)	0.28	(slightly limited)	0.20		
Lamoni	 Very limited		 Very limited		 Very limited		 Very limited		 Moderately limited	
	~shrink-swell	1.00	~wetness	1.00	~shrink-swell	1.00	~low strength	1.00	~too clayey	0.60
	(very limited)		(very limited)		(very limited)		(very limited)		(moderately limited)	
	~wetness	0.59	~shrink-swell	1.00	~slope	0.83	~shrink-swell	1.00	~wetness	0.28
	(moderately limited) ~slope	 0.15	(very limited) ~slope	 0.15	(limited) ~wetness	 0.28	(very limited) ~wetness	 0.28	(slightly limited)	
	(slightly limited)		(slightly limited)		(slightly limited)	0.20	~wethess (slightly limited)	0.20		
LmC2:		 		 		 		 		
Adair	Moderately limited	İ	Very limited	İ	Limited	İ	Very limited	j	Moderately limited	İ
	~wetness	0.59	~wetness	1.00	~slope	0.83	~low strength	1.00	~too acid	0.42
	(moderately limited)		(very limited)		(limited)		(very limited)		(moderately limited)	
	~shrink-swell	0.45	~shrink-swell	0.45	~shrink-swell	0.45	~shrink-swell	0.45	~wetness	0.28
	(moderately limited) ~slope	0.15	(moderately limited) ~slope	 0.15	(moderately limited) ~wetness	 0.28	(moderately limited) ~wetness	0.28	(slightly limited)	
	(slightly limited)		(slightly limited)		(slightly limited)	0.20	(slightly limited)			
Lamoni	 Very limited	 	 Very limited		 Very limited		 Very limited		 Moderately limited	
	~shrink-swell	1.00	~wetness	1.00	~shrink-swell	1.00	~low strength	1.00	~too clayey	0.60
	(very limited)	[(very limited)	[(very limited)	ļ	(very limited)	[(moderately limited)	
	~wetness	0.59	~shrink-swell	1.00	~slope	0.83	~shrink-swell	1.00	~wetness	0.28
	(moderately limited)		(very limited)		(limited)		(very limited)		(slightly limited)	
	<pre> ~slope (slightly limited)</pre>	0.15	~slope (slightly limited)	0.15	~wetness (slightly limited)	0.28	~wetness (slightly limited)	0.28		
	(stidingly limited)		(singingly limited)		(SIIGHTLY IIMILEG)		(pridicty truited)			!

Building Site Development

Map symbol and soil name	Dwellings without base	ements	Dwellings with basem	ents	Small commercial build	dings	Local roads and str	eets	Lawns and landscap	ing
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value 	Rating class and limiting features	Value
LmC3:		j I		 		j I		j I		İ
Adair	Moderately limited	İ	Very limited	İ	Limited	İ	Very limited	İ	Moderately limited	İ
	~wetness	0.59	~wetness	1.00	~slope	0.83	~low strength	1.00	~too acid	0.42
	(moderately limited)		(very limited)		(limited)		(very limited)		(moderately limited)	
	~shrink-swell		~shrink-swell	1	~shrink-swell	0.45	~shrink-swell	0.45	~wetness	0.28
	(moderately limited)		(moderately limited)	!	(moderately limited)		(moderately limited)		(slightly limited)	
	~slope	0.15	~slope	0.15		0.28		0.28		
	(slightly limited)		(slightly limited)		(slightly limited)		(slightly limited)			
Lamoni	 Very limited	 	 Very limited		 Very limited	 	 Very limited	 	 Moderately limited	
240112	~shrink-swell	1.00	~wetness	1.00	~shrink-swell	1.00	~low strength		-too clayey	0.60
	(very limited)		(very limited)		(very limited)		(very limited)		(moderately limited)	
	~wetness	0.59	~shrink-swell	1.00	~slope	0.83	~shrink-swell	1.00	~wetness	0.28
	(moderately limited)	İ	(very limited)	İ	(limited)	ĺ	(very limited)	İ	(slightly limited)	İ
	~slope	0.15	~slope	0.15	~wetness	0.28	~wetness	0.28		
	(slightly limited)		(slightly limited)		(slightly limited)	ļ	(slightly limited)			
LmD:	 					l I		 		
Adair	Limited	İ	 Very limited	İ	Very limited	İ	 Very limited	İ	Limited	İ
	~slope	0.76	~wetness	1.00	~slope	1.00	~low strength	1.00	~slope	0.63
	(limited)		(very limited)		(very limited)		(very limited)		(limited)	
			~slope	0.76		0.45		0.63	~too acid	0.42
	(moderately limited)		(limited)		(moderately limited)	[(limited)	[(moderately limited)	
		0.45	~shrink-swell	0.36	~wetness	0.28	~shrink-swell	0.45	~wetness	0.28
	(moderately limited)		(moderately limited)		(slightly limited)		(moderately limited)		(slightly limited)	
Lamoni	 Very limited		 Very limited		 Very limited	l I	 Very limited	 	 Limited	
	~shrink-swell	1.00	~wetness	1.00	~slope	1.00	~low strength	1.00	~slope	0.63
	(very limited)		(very limited)		(very limited)		(very limited)		(limited)	
	~slope	0.76	~shrink-swell	1.00	~shrink-swell	1.00	~shrink-swell	1.00	~too clayey	0.60
	(limited)	İ	(very limited)	İ	(very limited)	İ	(very limited)	İ	(moderately limited)	İ
	~wetness	0.59	~slope	0.76	~wetness	0.28	~slope	0.63	~wetness	0.28
	(moderately limited)		(limited)		(slightly limited)		(limited)		(slightly limited)	

Building Site Development

Map symbol and soil name	Dwellings without bas	ements	Dwellings with basem	ents	Small commercial build	dings	Local roads and str	eets	Lawns and landscap	ping
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LmD2:		 				 		 		
Adair	Limited	i	 Very limited	i	 Very limited	i	Very limited	i	Limited	i
	~slope	0.76	~wetness	1.00	~slope	1.00	~low strength	1.00	-slope	0.63
	(limited)		(very limited)		(very limited)		(very limited)		(limited)	
	~wetness	0.59	~slope	0.76	~shrink-swell	0.45	~slope	0.63	~too acid	0.42
	(moderately limited)		(limited)		(moderately limited)		(limited)		(moderately limited))
	~shrink-swell	0.45	~shrink-swell	0.45		0.28	~shrink-swell	0.45	~wetness	0.28
	(moderately limited)		(moderately limited)		(slightly limited)	İ	(moderately limited)		(slightly limited)	
Lamoni	 Very limited		 Very limited		 Very limited	 	 Very limited	 	 Limited	
	~shrink-swell	1.00	~wetness	1.00	~slope	1.00	~low strength	1.00	1 ·· · · · · · · · · · · · · · · · · ·	0.63
	(very limited)		(very limited)		(very limited)		(very limited)		(limited)	
	~slope	0.76	~shrink-swell	1.00	~shrink-swell	1.00		1.00	-too clayey	0.60
	(limited)		(very limited)		(very limited)		(very limited)		(moderately limited)	
	~wetness	0.59	~slope	0.76	~wetness	0.28	~slope	0.63	~wetness	0.28
	(moderately limited)		(limited)		(slightly limited)		(limited)		(slightly limited)	
LmD3:						ļ				
Adair			Very limited		Very limited		Very limited		Limited	
	~slope	0.76	~wetness	1.00		1.00	~low strength	1.00		0.63
	(limited)		(very limited)		(very limited)		(very limited)		(limited)	
	~wetness	0.59	~slope	0.76	~shrink-swell	0.45		0.63	~too clayey	0.60
	(moderately limited)		(limited)		(moderately limited)		(limited)		(moderately limited)	
	~shrink-swell	0.45	~shrink-swell	0.45		0.28	~shrink-swell	0.45	~too acid	0.42
	(moderately limited)		(moderately limited)		(slightly limited)	 	(moderately limited)	 	(moderately limited))
Lamoni	Very limited	İ	Very limited	İ	Very limited	İ	Very limited	İ	Limited	i
	~shrink-swell	1.00	~wetness	1.00	~slope	1.00	~low strength	1.00	~slope	0.63
	(very limited)	İ	(very limited)	İ	(very limited)	İ	(very limited)	İ	(limited)	i
	~slope	0.76	~shrink-swell	1.00	~shrink-swell	1.00	~shrink-swell	1.00	~too clayey	0.60
	(limited)	İ	(very limited)	İ	(very limited)	İ	(very limited)	İ	(moderately limited)) į
	~wetness	0.59	~slope	0.76	~wetness	0.28	~slope	0.63	~wetness	0.28
	(moderately limited)	i	(limited)	i	(slightly limited)	i	(limited)	i	(slightly limited)	i

Building Site Development

Map symbol and soil name	Dwellings without base	ements	Dwellings with basem	ments	Small commercial build	dings	Local roads and str	eets	Lawns and landscap	ping
	Rating class and limiting features	Value 	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LnB: Lineville	 Moderately limited ~wetness (moderately limited) ~shrink-swell (moderately limited)	0.45	 Very limited ~wetness (very limited) ~shrink-swell (limited)	1.00	 Moderately limited ~shrink-swell (moderately limited) ~wetness (slightly limited) ~slope (slightly limited)	0.45	<pre>(very limited) ~shrink-swell (moderately limited)</pre>	 1.00 0.45 0.28	 Slightly limited ~wetness (slightly limited)	0.28
LnB2: Lineville	 Moderately limited ~wetness (moderately limited) ~shrink-swell (moderately limited)	0.45	 Very limited ~wetness (very limited) ~shrink-swell (limited)	1.00	 Moderately limited ~shrink-swell (moderately limited) ~wetness (slightly limited) ~slope (slightly limited)	0.45	(very limited) ~shrink-swell (moderately limited)	 1.00 0.45 0.28	 Slightly limited ~wetness (slightly limited) 	0.28
LnC: Lineville	Moderately limited ~wetness (moderately limited) ~shrink-swell (moderately limited) ~slope (slightly limited)	0.45	 Very limited ~wetness (very limited) ~shrink-swell (limited) ~slope (slightly limited)	1.00	 Limited ~slope (limited) ~shrink-swell (moderately limited) ~wetness (slightly limited)	0.83	<pre>(very limited) ~shrink-swell (moderately limited)</pre>	 1.00 0.45 0.28	 Slightly limited ~wetness (slightly limited)	0.28
LnC2: Lineville	 Moderately limited ~wetness (moderately limited) ~shrink-swell (moderately limited) ~slope (slightly limited)	0.45	 Very limited ~wetness (very limited) ~shrink-swell (limited) ~slope (slightly limited)	1.00	 Limited ~slope (limited) ~shrink-swell (moderately limited) ~wetness (slightly limited)	0.83	(moderately limited)	 1.00 0.45 0.28	 Slightly limited ~wetness (slightly limited) 	0.28

Building Site Development

Map symbol and soil name	Dwellings without bas	ements	Dwellings with basem	ents	Small commercial buildings		Local roads and streets		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LvC3: Lineville	 Moderately limited ~wetness (moderately limited) ~shrink-swell (moderately limited) ~slope (slightly limited)	0.45	Very limited -wetness (very limited) -shrink-swell (limited) -slope (slightly limited)	 1.00 0.93 0.15	 Limited ~slope (limited) ~shrink-swell (moderately limited) ~wetness (slightly limited)	0.83	 Very limited ~low strength (very limited) ~shrink-swell (moderately limited) ~wetness (slightly limited)	 1.00 0.45 0.28	 Moderately limited ~too clayey (moderately limited) ~wetness (slightly limited)	0.60
MoA: Moniteau	 Very limited ~wetness (very limited) ~shrink-swell (moderately limited)	1.00	 Very limited ~wetness (very limited) ~shrink-swell (slightly limited)	 1.00 0.15	 Very limited ~wetness (very limited) ~shrink-swell (moderately limited)	 1.00 0.45 	 Very limited ~low strength (very limited) ~wetness (very limited) ~shrink-swell (moderately limited)	 1.00 1.00 0.45	 Very limited ~wetness (very limited) ~too acid (slightly limited)	 1.00 0.12
NeA: Nevin	 Limited ~wetness (limited) ~shrink-swell (moderately limited)	0.99	 Very limited ~wetness (very limited) ~shrink-swell (slightly limited)	1.00	 Limited ~wetness (limited) ~shrink-swell (moderately limited)	 0.60 0.45 	 Very limited ~low strength (very limited) ~wetness (limited) ~shrink-swell (moderately limited)	 1.00 0.60 0.45	 Limited ~wetness (limited) ~too acid (slightly limited)	0.60
PoB: Polo	 Moderately limited ~shrink-swell (moderately limited) 	 0.45 	Moderately limited ~shrink-swell (moderately limited)	 0.45 	 Moderately limited ~shrink-swell (moderately limited) ~slope (slightly limited)	 0.45 0.15	 Very limited ~low strength (very limited) ~shrink-swell (moderately limited)	 1.00 0.45	 Not limited 	

Building Site Development

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings		Local roads and streets		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
PoC: Polo	 Moderately limited ~shrink-swell (moderately limited) ~slope (slightly limited)		 Moderately limited ~shrink-swell (moderately limited) ~slope (slightly limited)	j	 Limited ~slope (limited) ~shrink-swell (moderately limited)	0.45	 Very limited ~low strength (very limited) ~shrink-swell (moderately limited)	 1.00 0.45	 Not limited 	
PoC2: Polo	 		 Moderately limited ~shrink-swell (moderately limited) ~slope (slightly limited)	j	Limited -slope (limited) -shrink-swell (moderately limited)	0.45	 Very limited ~low strength (very limited) ~shrink-swell (moderately limited)	 1.00 0.45	 Not limited 	
PoD2: Polo	 Limited ~slope (limited) ~shrink-swell (moderately limited)	0.45	 Limited ~slope (limited) ~shrink-swell (moderately limited)	0.45	 Very limited ~slope (very limited) ~shrink-swell (moderately limited)	0.45	 Very limited ~low strength (very limited) ~slope (limited) ~shrink-swell (moderately limited)	 1.00 0.63 0.45	 Limited ~slope (limited) 	0.63
Qu: Quarry	 Not rated 	 	 Not rated 	 	 Not rated 	 	 Not rated 	 	 Not rated 	
Ro: Rock land	 Not rated 		 Not rated 		 Not rated 		 Not rated 	 	 Not rated 	

Building Site Development

Map symbol and soil name	Dwellings without bas	sements	Dwellings with basements		Small commercial buildings		Local roads and streets		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
SaB:										
Sampsel	- Very limited ~shrink-swell (very limited) ~wetness (very limited)	1.00	Very limited ~wetness (very limited) ~shrink-swell (very limited)	1.00	Very limited ~shrink-swell (very limited) ~wetness (very limited) ~slope (slightly limited)	1.00	(very limited)		Very limited ~wetness (very limited) ~too clayey (moderately limited)	 1.00 0.60
SaB2: Sampsel	- Very limited ~shrink-swell (very limited) ~wetness (very limited)	1.00	 Very limited ~wetness (very limited) ~shrink-swell (very limited)	1.00	 Very limited ~shrink-swell (very limited) ~wetness (very limited) ~slope (slightly limited)	1.00	 Very limited ~low strength (very limited) ~shrink-swell (very limited) ~wetness (very limited)	1.00	 Very limited ~wetness (very limited) ~too clayey (moderately limited)	 1.00 0.60
SaC: Sampsel	- Very limited	1.00	 Very limited ~wetness (very limited) ~shrink-swell (very limited) ~slope (slightly limited)	1.00	 Very limited ~shrink-swell (very limited) ~wetness (very limited) ~slope (limited)	1.00	 Very limited ~low strength (very limited) ~shrink-swell (very limited) ~wetness (very limited)	1.00	 Very limited ~wetness (very limited) ~too clayey (moderately limited)	1.00
SaC2: Sampsel	- Very limited ~shrink-swell (very limited) ~wetness (very limited) ~slope (slightly limited)	1.00	 Very limited ~wetness (very limited) ~shrink-swell (very limited) ~slope (slightly limited)	1.00	 Very limited ~shrink-swell (very limited) ~wetness (very limited) ~slope (limited)	1.00	 Very limited ~low strength (very limited) ~shrink-swell (very limited) ~wetness (very limited)	1.00	 Very limited ~wetness (very limited) ~too clayey (moderately limited)	1.00

Building Site Development

Map symbol and soil name	Dwellings without base	ements	Dwellings with basem	ents	Small commercial buildings		Local roads and streets		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value 	Rating class and limiting features	Value	Rating class and limiting features	Value
SaC3:										
Sampsel	~shrink-swell (very limited)	 1.00 1.00 0.15	Very limited -wetness (very limited) -shrink-swell (very limited) -slope (slightly limited)	 1.00 1.00 0.15	Very limited ~shrink-swell (very limited) ~wetness (very limited) ~slope (limited)	İ	Very limited -low strength (very limited) -shrink-swell (very limited) -wetness (very limited)		Very limited ~wetness (very limited) ~too clayey (moderately limited)	1.00
SaD2:		 			 				 	
Sampsel	~shrink-swell (very limited) ~wetness (very limited)	 1.00 1.00 0.76	Very limited ~wetness (very limited) ~shrink-swell (very limited) ~slope (limited)	 1.00 1.00 0.76	Very limited ~slope (very limited) ~shrink-swell (very limited) ~wetness (very limited)	 1.00 1.00 1.00	(very limited)	1.00	Very limited ~wetness (very limited) ~slope (limited) ~too clayey (moderately limited)	1.00
SnC:	 Moderately limited		 Very limited		 Limited		 Very limited		 Limited	
Snead	<pre> Moderately limited ~shrink-swell (moderately limited) ~wetness (moderately limited) ~slope (slightly limited)</pre>	0.45	<pre> very limited ~wetness (very limited) ~soft bedrock <20" (very limited) ~shrink-swell (moderately limited)</pre>	 1.00 1.00 0.45	Limited ~slope (limited) ~shrink-swell (moderately limited) 	 0.83 0.45 	very limited ~low strength (very limited) ~shrink-swell (moderately limited) 	 1.00 0.45 		0.99
SnD: Snead	 Limited ~slope (limited)	 0.76 	 Very limited ~wetness (very limited)	 1.00	 Very limited ~slope (very limited)	j	 Very limited ~low strength (very limited)	1.00	 Limited ~depth to bedrock (limited)	0.99
	(moderately limited)	0.45	<pre>~soft bedrock <20" (very limited) ~slope (limited)</pre>	1.00 0.76	<pre> ~shrink-swell (moderately limited) </pre>	0.45 	<pre> ~slope (limited) ~shrink-swell (moderately limited)</pre>		<pre> ~slope (limited) ~too clayey (moderately limited)</pre>	0.63

Building Site Development

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings		Local roads and streets		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value 	Rating class and limiting features	Value
SnD2:						<u> </u> 				
Snead	Limited ~slope (limited)	 0.76 	Very limited ~wetness (very limited)	1.00	Very limited ~slope (very limited)	 1.00 	Very limited ~low strength (very limited)	 1.00 	Limited ~depth to bedrock (limited)	0.99
	<pre>~shrink-swell (moderately limited)</pre>	0.45	<pre>~soft bedrock <20" (very limited)</pre>	1.00	<pre> ~shrink-swell (moderately limited)</pre>	0.45	~slope (limited)	0.63	~slope (limited)	0.63
	<pre> ~wetness (moderately limited)</pre>	0.45	~slope (limited)	0.76			~shrink-swell (moderately limited)	0.45	<pre> ~too clayey (moderately limited)</pre>	0.60
SnE: Snead	 Very limited		 Very limited		 Very limited	 	 Very limited	 	 Very limited	
Silcad	~slope (very limited)	1.00	very limited very limited	1.00	1 -	1.00	1 -	1.00	1 -	1.00
	~shrink-swell (moderately limited)	0.45	~wetness (very limited)	1.00	~shrink-swell (moderately limited)	0.45		1.00	~depth to bedrock (limited)	0.99
	~wetness (moderately limited)	0.45	~soft bedrock <20" (very limited)	1.00		į Į	~shrink-swell (moderately limited)	0.45	~too clayey (moderately limited)	0.60
W: Water	 Not rated		 Not rated		 Not rated	 	 Not rated	 	 Not rated	
water			 - 			 	 - 	 	 - 	
Zo:		 				 				
Zook	1 1 2 2		 Very limited		 Very limited		 Very limited	 	 Very limited	
	<pre> ~wetness (very limited)</pre>	1.00	~flooding (very limited)	j	<pre> ~flooding (very limited)</pre>	j	(very limited)	1.00 	<pre> ~wetness (very limited)</pre>	1.00
	<pre> ~flooding (very limited)</pre>	1.00	~wetness (very limited)	1.00	<pre> ~wetness (very limited)</pre>	1.00	~wetness (very limited)	1.00 	<pre> ~flooding (very limited)</pre>	1.00
	~shrink-swell (very limited)	1.00	~shrink-swell (very limited)	1.00		1.00		1.00	<pre> (very limited) ~too clayey (moderately limited)</pre>	0.60

Building Site Development

Map symbol and soil name	 Dwellings without basements 		Dwellings with basements		 Small commercial buildings 		Local roads and streets		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value -
Zs:										
Zook	Very limited	İ	Very limited	i	Very limited	i	Very limited	İ	Very limited	j
	~wetness (very limited)	1.00	~flooding (very limited)	1.00	~flooding (very limited)	1.00	~low strength (very limited)	1.00	~wetness (very limited)	1.00
	~flooding (very limited)	1.00	~wetness (very limited)	1.00	~wetness (very limited)	1.00	~wetness (very limited)	1.00	~flooding (very limited)	1.00
	~shrink-swell (very limited)	1.00	~shrink-swell (very limited)	1.00	~shrink-swell (very limited)	1.00	~flooding (very limited)	1.00	~too clayey (very limited)	1.00
		 		 		.	 	 _		_